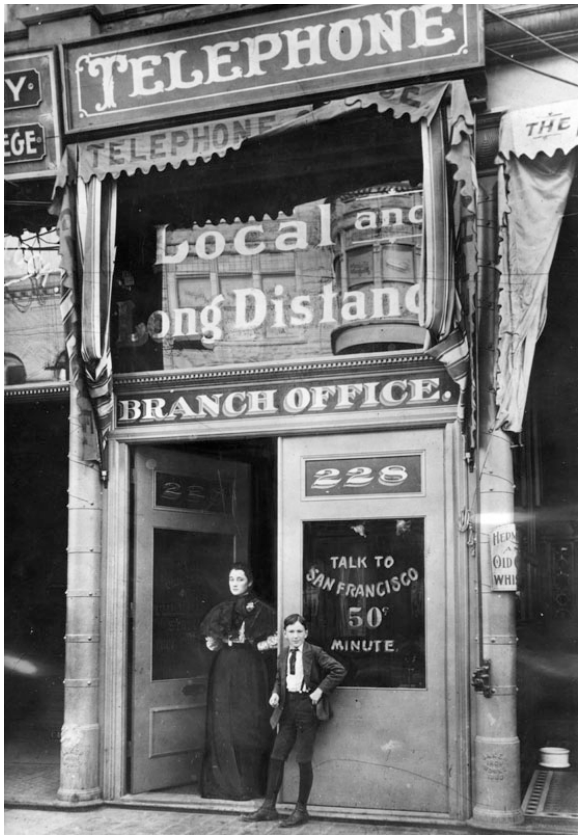
SurveyLA
Los Angeles Historic Resources Survey

LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT

Context: Public and Private Institutional Development, 1950-1980

Sub-Context: Communications

Theme: Telephone History and Development, 1881-1974



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PREFACE

This theme of Telephone History and Development is a component of Los Angeles' historic context statement and provides guidance to field surveyors in identifying and evaluating potential historic resources relating to this category. Refer to HistoricPlacesLA.org for information on designated resources associated with this theme as well as those identified through SurveyLA and other surveys.

CONTRIBUTOR

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THEME INTRODUCTION

This theme looks at resources related to telephone service based on the historic Bell system of landline communication. It begins in 1881 with the creation of the Los Angeles Telephone Company, an enterprise using the Bell patents. It ends in 1974 when the Federal government sued American Telephone and Telegraph, the corporate entity controlling the Bell system, for monopolistic practices. The result of the suit was the end of the system and the emergence of the multi-faceted telecommunication business of today.

The Bell system consisted of local telephone companies serving individual customers and a national company interconnecting the local companies through long distance. After a period of disorderly competition, there emerged what amounted to a monopoly acceptable to the Federal government. A single national corporation, American Telephone and Telegraph or AT&T, controlled both the lines connecting the local companies and most, if not all, of the local companies themselves.

During this period, from the 1880s through the 1970s, telephone-related construction was the responsibility of the local companies. Common in Los Angeles were three types of resources. The first, unique to the telephone and the most important for this theme, was the exchange. It housed the switchboards and electrical equipment for customers in specific districts.

The exchange was essentially a form of industrial architecture. From the time that it became a distinct building type in the early 1920s, it was shaped to fit the demands of machinery and was intended to be modified as the machinery changed. At the same time, it was a work of monumental scale, placed on prominent sites in commercial and residential neighborhoods. The best of these resources made skillful use of the styles of the day and accommodated change with well-designed alterations.

As an architectural type the telephone exchange can be compared to buildings of the Los Angeles Department of Water and Power. Exchanges resemble the neighborhood electrical distributing stations

from the 1920s and 1930s. Both were large industrial structures designed to fit into residential and commercial districts. Both also served as symbols of a benevolent urban service providing for the general welfare.

The second resource type was the administrative office, containing the bureaucracy and points of customer contact. The administrative office generally followed the conventional commercial architectural forms of its period, with nothing to differentiate it as a distinct building type related to telephone service. Resources may be significant as good examples of a style of architecture, or as the site of a significant event in the history of telephone service.

The third was the service facility, particularly the large garages often adjacent to exchanges. Some were strictly utilitarian, while others, from the 1916-1945 period, featured facades of significant architectural quality. But, as with the administrative office, the service facility was not a building type unique to telephone service.

The theme of Telephone History and Development may overlap with other SurveyLA themes as follows:

- Related subthemes of Architecture and Engineering context such as: Renaissance Revival, 1895-1935; Georgian Revival, 1895-1940; PWA Moderne, 1928-1945; Late Moderne, 1936-1960; Mid-Century Modern, 1945-1970; Brutalism, 1966-1980
- Theme of Municipal Water and Power, 1902-1980
- Related themes of Residential Development and Suburbanization context
- Subtheme of Technological Developments in Construction

HISTORIC CONTEXT

The telephone is one of those conveniences of urban life that is taken for granted, like water and electricity. Based on an invention of the late 1870s, by the turn of the twentieth century it had become a commonplace in industry, commerce, and well-off homes. By the 1920s it was considered an urban necessity for all.

Its history has been shaped by accommodation to technological change and by controversy over its corporate structure. Telephone service in the 1880s and 1890s depended upon private investors gaining a license from the holders of the original patents. Then, as the patents expired, competing investors built parallel systems that led to chaos. By the early 1910s, public demand for order resulted in the creation of local monopolies that promised efficiency. In 1916 Los Angeles gained such a monopoly to replace its competing companies.

During the early years of competitive chaos, there was little of significance in telephone architecture. But the period of consolidation that followed the 1916 merger produced the first of the monumental telephone buildings. The 1920s and 1930s saw the construction of numerous neighborhood exchanges, block-like multi-story edifices of noble if forbidding appearance, containing the switching equipment and its operators. Also completed in the twenties was the Telephone Building, a large Downtown office structure from which all company matters were managed, and which symbolized the power and wealth of the company. Even the lowly telephone truck garages from this period featured ornate facades.

In the years following the Second World War the telephone company turned toward simplicity in design and innovation in technology. After 1945 buildings adopted the clean lines of modernism while accommodating the coaxial cable, the transistor and the microwave. As human operators became unnecessary and electronic switching took over, the windowless exchange became the norm. But by the mid-1970s the monopoly that created this system was deemed illegal, and the telephone company as it existed soon came to an end.

Era of Competition, 1881-1916

The story of the invention of the telephone is familiar. Alexander Graham Bell devised a functional instrument in 1876 and demonstrated it at the Centennial Exhibition in Philadelphia. One year later, in 1877, he created the Bell Telephone Company which held the patents to his invention. The possession of these patents was the basis of the telephone system that evolved over the next one hundred years.[1]

Along with the telephone instrument came the development of the exchange, a system of lines linked to a switchboard that would permit owners of instruments to reach each other. The first exchange

[1] John Brooks, *Telephone: The First Hundred Years* (New York: Harper & Row, 1975), 35-55.

connecting phones by outdoor wires was installed in 1877. By 1878 numerous exchanges were functioning, including one in San Francisco, the first in California.[2]

The spread of this system of phones, lines and exchanges depended upon local investors obtaining a license from the Bell Telephone Company and then obtaining equipment from it. In 1880 the Bell company, soon to be renamed American Telephone and Telegraph, gained the legal right to own stock in the licensed local companies, thereby establishing the interlocking network that came to dominate telephone service.[3]

Sources differ as to when Los Angeles got its first telephones. The *Los Angeles Times*, writing in 1921, maintained that the first exchange was established in 1879, with a switchboard in the Baker Block at Main and Arcadia (no longer extant). But the commonly accepted date for the beginning of service in Los Angeles is 1881. In March of that year the Los Angeles Telephone Company was organized and shortly thereafter gained a franchise to string lines within the City. By 1886, there were by one count 410 subscribers in the City and an additional nineteen in the county.[4]

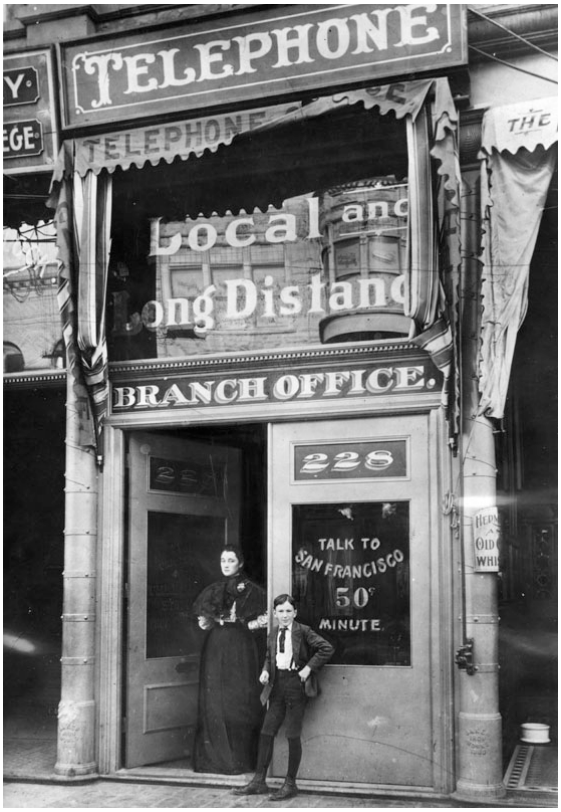
It was also during the 1880s that lines began to connect exchanges with each other, both among neighborhoods and between cities. By 1894 a workable link had been established between Los Angeles and San Francisco and by 1898 a phone connection could be made from Siskiyou to San Diego. It was also during this period that the Los Angeles Telephone Company was absorbed into the larger Sunset Telephone Company and took its name.[5]

After operating in a series of rented spaces, the Sunset Telephone Company constructed its own building in 1893. Located along the north side of Second Street, between Hill Street and Broadway, it was described as a marble-fronted structure which housed both offices and the main exchange. It was declared inadequate in 1901, and Sunset started planning for a new headquarters on the east side of Hill between Sixth and Seventh Streets. When completed it consisted of an office block in front and a separate exchange in the rear. (None of these buildings still exists.) [6]

Other facilities varied in character. Some were rented storefront pay stations that offered local and long-distance service for those who did not have a phone of their own. One such, at 204 South Broadway, contained a reading and writing room for those waiting to use the line. Larger neighborhood exchanges occupied their own buildings, while smaller ones shared space with other functions, such as

[2] Ibid., 53, 65.
[3] Ibid., 83.
[4] Emily Bills, "Connecting Lines: L.A.'s Telephone History and the Binding of the Region," *Southern California Quarterly,* Volume 91, Number 1 (2009), 27; *Los Angeles Times,* May 7, 1911 and August 21, 1921.
[5] *Los Angeles Times,* August 10, 1883; February 7, 1885; December 5, 1894; August 25, 1898.
[6] *Los Angeles Times,* August 27, 1893; October 3, 1901; December 28, 1901; February 23, 1902; November 16, 1902.

the Boyle Heights exchange which consisted of a single switchboard at the rear of a drug store at 1952 East First Street.[7]



Storefront Pay Station 1899
228 South Spring Street
(Los Angeles Public Library)

There is one early resource still extant. Its facade has been altered, but its sides and rear appear intact. This is the Sunset Telephone Company's facility at 1320 South Hope Street. Evidence indicates that it was built in two stages. The rear portion dates from no later than 1901 and takes an industrial form, consisting of a rectangular masonry mass with large arched windows lighting its main floor. It served as the West Exchange, providing switching for 4000 customers.[8]

An addition to its front was constructed in 1902. The addition is T-shaped, with the top of the T extending the width of the existing building and the leg stretching toward Hope Street. It maintained the same masonry construction as the rear but took a more residential form, with a hipped roof of Spanish tiles, in what the *Times* described as "mission style."[9] The addition allowed the facility to

[7] *Los Angeles Times,* January 27, 1901 and April 17, 1901.
[8] *Los Angeles Times,* December 28, 1901.
[9] *Los Angeles Times,* January 5, 1902.

become Sunset's Sub-Main Telephone Station. The new portion toward the front contained what was called the Operating Room, while original portion in the rear housed the construction department.[10]

Original Rear Portion, Sunset Telephone Building, circa 1901
(Projecting eave of front addition on far right in shadow)
1320 South Hope Street
(Author)

North Side of Front Addition, Sunset Telephone Building, 1902
1320 South Hope Street
(Author)

By the early 1900s Sunset had competition. The Bell system patents had expired in 1893, and other companies began manufacturing equipment for sale to local entrepreneurs with no requirement that they obtain a Bell system license. As early as 1894 businessmen in Los Angeles began exploring the possibilities of challenging Sunset. But it was not until 1901 that the City Council instructed the Board of

[10] Sanborn Map, Volume 1, 1906, Sheet 98. The footprint shown in the 1906 map matches the extant building. It currently houses a church.

Public Works to advertise for a second telephone franchise. The winner was the Home Telephone Company, incorporated in 1902. It originally operated its first exchange out of an office at 246 South Hill Street.[11]

As early as 1904 Home proposed an ambitious building program. It first constructed an exchange at 1932 South Grand Avenue. Others followed at South Avalon Boulevard and Vernon Avenues in Southeast Los Angeles, St. Louis Street near Pennsylvania Avenue in Boyle Heights, Broadway and Daly Street in Lincoln Heights, and Avenue 58 and Marmion Way in Highland Park. (Of these only the Lincoln Heights building is still extant albeit altered.)[12]

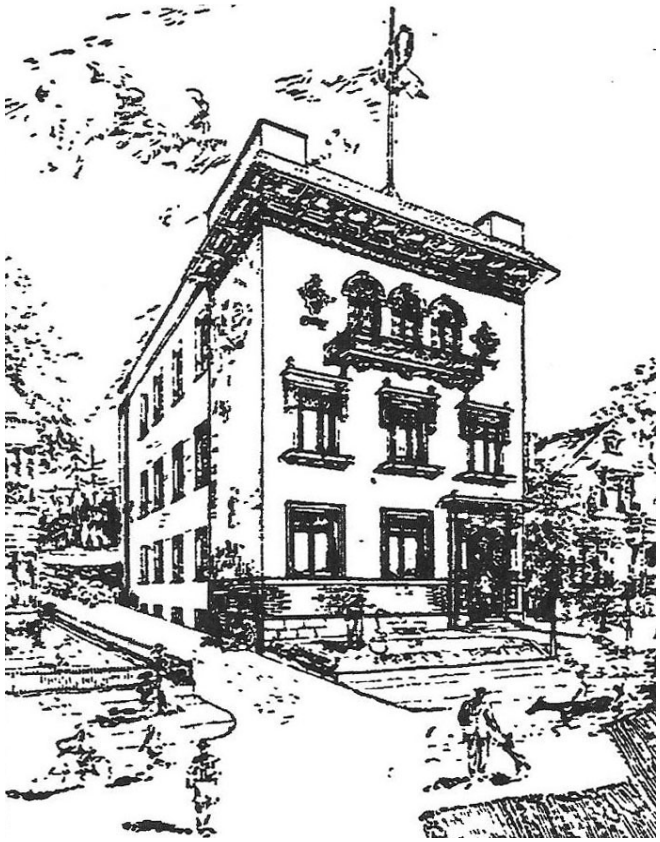
Most important, and still extant, is Home's headquarters building at 716 South Olive Street. It housed both offices and the primary downtown exchange. Three stories with masonry walls and a steel frame, its tall ceilings make it fifty feet in height. The architects were Morgan and Walls (later Morgan, Walls and Clemens), and the original façade was described as consisting of pressed brick and terra cotta. (The façade was replaced around 1930.) [13]

Home Telephone Building, 1906
716 South Olive Street
(Author)

[11] Brooks, *Telephone*, 101, 104-105; *Los Angeles Times,* April 20, 1894; June 25, 1901; October 29, 1901; February 6, 1902; September 21, 1902; April 2, 1903; January 1, 1906.
[12] *Los Angeles Times,* June 28, 1904.
[13] *Los Angeles Times,* January 13, 1907; March 4, 1911; "Application for the Erection of a Building," March 14, 1906, and "Application to Alter, October 15, 1929, Search Online Building Records at http://www.ladbs.org, accessed March 2018.

Sunset responded with a construction program of its own. In the process it produced the first identifiable building type used for the neighborhood exchange. Between 1910 and 1912 Sunset built three structures of similar design, all for the exclusive use of switching equipment and the employees that ran it. They were three stories in height, with tall ceilings to accommodate the machinery. The first story held administrative space and what were referred to as retiring quarters for staff on break. The second housed electrical equipment and was the level at which wires entered and left. The third held the manually operated switchboards.[14]

The three exchanges were located at 718 South Rampart Street in Westlake, the northeast corner of West Vernon and Denker Avenues serving what was then the Southwest district, and 1429 Gower Street in Hollywood. Unfortunately, none is extant, but drawings provided in the *Los Angeles Times* show that they were of similar style. Shoebox in form, with the narrow end facing the street, they featured Mission Style detailing. The *Times* noted that the Rampart Street exchange "might be mistaken for one of the fine apartment houses in the district.[15]



Sunset Telephone Exchange, 1910
718 South Rampart Street, Westlake
(Courtesy Los Angeles Times)

[14] *Los Angeles Times,* March 22, 1910; February 19, 1911; October 8, 1911; June 6, 1912.
[15] *Los Angeles Times,* March 22, 1910; February 19, 1911; October 8, 1911; June 6, 1912.

In 1914 Sunset also completed a new headquarters building on the site of the existing center at 422 South Hill Street. No longer standing, it was a six-story version of what Home had built on South Olive. Its ground floor housed administration, the second through the fourth operators at switchboards, and the fifth and sixth the electrical equipment. The drawing presented in the *Times* illustrated a standard Renaissance Revival loft building of steel and reinforced concrete. But a photo of the interior space housing the switchboards showed a double-height industrial space with metal stairways and mezzanines.[16]

By 1916 the two companies were comparable in size. Home had roughly 60,000 customers while Sunset had 68,000. Home was considered the more technologically advanced, having introduced an early version of the dial to more than half of its customers. Sunset, on the other hand, as part of the Bell System and having been absorbed by the much larger Pacific Telephone and Telegraph in 1906, offered reliable long-distance service. Unfortunately, the two did not interconnect.[17]

Generally, outlying neighborhoods were served by one or the other, although exchanges for both could be found in the same district. Lincoln Heights had a Sunset exchange at 2411 North Broadway and a Home exchange less than a block away on the other side of the street, at 2426 North Broadway. (Although altered, both buildings are extant and take the form of neighborhood business blocks.) Downtown and other commercial districts were served by both companies, and businesses felt the need to have two separate phones, one connected to Sunset and the other to Home.[18]

Public dissatisfaction with this dual system was understandably great. The original franchise to Sunset expired in 1916, and the City threatened not to renew it unless the two companies found some way to merge. The result was the creation of a new entity, Southern California Telephone, which combined Home and Sunset into a single company serving most, if not all, of Los Angeles. This new provider, a subsidiary of Pacific Telephone and Telegraph which itself was a subsidiary of American Telephone and Telegraph, brought together the long-distance capabilities of Sunset with the technological advances of Home.[19]

Era of Consolidation, 1916-1945

At the national level, stability came to the telephone business by way of two legal actions. In 1913 the Federal government and American Telephone and Telegraph reached an agreement known as the Kingsbury Commitment. AT&T gained an informal exemption from antitrust prosecution by promising to stop predatory acquisition of independent companies and to allow the existing independents to use

[16] *Los Angeles Times,* August 24, 1913; September 28, 1913; September 6, 1914.
[17] Robert M. Fogelson, *The Fragmented Metropolis: Los Angeles, 1850-1930* (Berkeley: University of California Press, 1967, 1993), 237; Gary Goff and others, "History of Los Angeles Telephone Service," at www.telephonecollector.info, accessed March 2018.
[18] Fogelson, *Fragmented Metropolis*, 237; Sanborn Maps, Volume 13, 1920, Sheets 1360 and 1967. Both buildings appear to have been standard neighborhood business blocks and, while greatly altered, still exist.
[19] Fogelson, *Fragmented Metropolis*, 237-238.

its long-distance lines. The Commitment was followed by the Graham Act of 1921, which explicitly exempted from antitrust prosecution the combination of competing local companies into a single local monopoly controlled by AT&T. This placed mergers such as that of Home and Sunset into the Southern California Telephone Company beyond legal challenge.[20]

The result was the Bell telephone system that remained in place through the 1970s. Dominating it was AT&T, which owned the long-distance lines, manufactured the telephone equipment, and held a controlling interest in most, if not all, of the country's local telephone companies. In its shadow were the few remaining independents, holding monopolies of their own in local areas but dependent upon AT&T for long-distance service. This system was based on the technology of a landline network and lasted until challenged by telecommunications not dependent upon wires.[21]

The Southern California Telephone Company was the presence of this nationwide system in most of Los Angeles. By May of 1917 it had taken over the facilities of Home and Sunset, and within a year had interconnected the two systems. But it was not until the early 1920s that the new company embarked on a program of expansion and equipment updating.[22]

This expansion and updating coincided with the development of the modern dial system of connecting callers. The required automatic switching equipment had been perfected by 1921 and the Bell system began offering dial service, including new telephone sets and exchange machinery, to its subsidiaries that year. Los Angeles began installing the new equipment in the summer of 1923 and by March of 1924 the City's change to the modern dial system was complete.[23]

This installation of new equipment required a large-scale construction program. In the process, the exchange as a building type, first introduced by Sunset between 1910 and 1912, matured. In addition to updating existing exchanges, eleven new buildings were designed specifically to house the new electrical equipment. They were all Class A, with steel frames and reinforced concrete floors and roofs, constructed in what was called a sectional design, with the ability to expand upward with additional stories or outward with additional wings.[24]

Many of these early 1920s exchanges still exist but have been altered beyond recognition. There are two, however, that provide a sense of their original massing and detailing. The first is 1900 South Grand Avenue, at the intersection with Washington Boulevard, in Southeast Los Angeles, and dates from 1924. Plans of its construction warranted comment in the *Los Angeles Times,* which noted its similarity to

[20] Brooks, *Telephone*, 136, 160.
[21] Steve Coll, *The Deal of the Century: The Breakup of AT&T* (New York: Atheneum, 1986), xvi-xvii.
[22] *Los Angeles Times,* May 2, 1917 and May 21, 1918.
[23] Brooks, *Telephone*, 140, 168; *Los Angeles Times,* July 22, 1923 and March 30, 1924.
[24] *Los Angeles Times,* July 16, 1925 and July 26, 1925.

other exchanges underway. It provided service to 35,000 phones and was designed specifically to house "tons of the heavy machine switching equipment" needed for the pending initiation of dial service.[25]

Southern California Telephone Exchange, 1924
1900 South Grand Avenue, Southeast Los Angeles
(Author)

The site held an older exchange, positioned slightly to the south, and the new exchange would be joined in 1929 by a telephone company clubhouse, since demolished, that provided a social center for employees. The exchange is a rectangle, 147 feet along Washington Boulevard and 86 feet along Grand Avenue. It is four stories tall, but rises to 76 feet, owing to the abnormal floor-to-floor heights required by the equipment.[26]

The construction is of steel frame, with concrete floors and roof, and interior partitions of concrete and structural tile. The exterior was originally brick, most likely in a Renaissance Revival style. (The current stucco finish was probably added when some of the windows were enclosed.) The façade retains the stringcourse and cornice moldings characteristic of that style. The original architect is listed as the Southern California Telephone Company, indicating in-house design.[27]

[25] *Los Angeles Times,* December 26, 1923.
[26] *Los Angeles Times,* January 19, 1929 and February 10, 1929; Sanborn Map, Volume 6, 1907, Sheet 698; "Application for the Erection of a Building," May 3, 1924, Search Online Building Records at www.ladbs.org, accessed March 2018.
[27] "Application for the Erection of a Building," May 3, 1924, Search Online Building Records, at www.ladbs.org, accessed March 2018.

The second example is the exchange at 1251-1255 North Vermont Avenue in Hollywood. The original section, consisting of the left three double bays, dates from 1924. Unlike 1900 South Grand, this building was designed by an outside architectural firm, John and Donald Parkinson. This firm was to do a great deal of work for the telephone company, and its successor firm of Woodford and Bernard designed the matching 1956 addition to the right. (The two sections can be differentiated by a slight change in brick color and by the bolt heads of its seismic upgrading on the original's facade.)[28]

Southern California Telephone Exchange, 1924 (addition 1956)
1251-1255 North Vermont Avenue, Hollywood
(Author)

The original rectangular building extends 73 feet along Vermont Avenue and 178 feet toward the rear. It is three stories tall but reaches 60 feet in height. As with 1900 South Grand Avenue, construction is of steel framing with reinforced concrete floors and roof. Interior partitions are of structural clay tile. The exterior is of concrete for the first level and brick above in the Georgian Revival style.[29]

The most important of the period's exchanges was the height-limit building at 433 South Olive Street. It dates from 1923-1924 and was intended to receive lines from other cities as well as to serve as a local exchange for Downtown. The *Times* noted that it would have "extra-high ceilings" and be used solely for switching equipment. Its site extended through the block to Grand Avenue, with the assumption that the building would eventually be extended as well. This was the first building on what was later to become a campus of telephone equipment structures.[30]

[28] "Application for the Erection of a Building," December 2, 1924, and "Application to Alter," January 27, 1956, Search Online Building Records at www.ladbs.org, accessed March 2018.
[29] "Application for the Erection of a Building," December 2, 1924, Search Online Building Records at www.ladbs.org, accessed March 2018.
[30] *Los Angeles Times,* November 15, 1923.

The architect was the San Francisco firm of Bliss and Favelle, which also designed the Pacific Telephone Building in that city. Although only nine stories, 433 South Olive reached the full permissible height at the time of 150 feet. It was of standard high-rise loft construction, with a steel frame, reinforced concrete floors and roof, and structural clay tile interior partitions. The exterior was designed in the Renaissance Revival style of brick and terra cotta common among office buildings of the day. (The building still stands but the façade was replaced with a sheer windowless face in the early 1970s.) [31]

Southern California Telephone Exchange, 1923-1924
433 South Olive Street
(Los Angeles Public Library)

The early 1920s also saw the telephone company expand its administrative staff and construct a facility separate from the exchanges. The idea of an administration-only building first took form when in June of 1917 the newly created Southern California Telephone placed all its office staff in the old Home headquarters at 716 South Olive. The South Hill Street building that had housed Sunset's administration became an exchange.[32]

Soon 716 South Olive proved inadequate for the expanding company's administrative needs. The existing office at 716 became yet another exchange and a new office building nearby, at 738-48 South Olive Street, began construction in 1922. It was erected by a developer, James H. Adams, and leased to

[31] "Bliss & Faville (1898-1925)," at www.noehill.com/architects, accessed March 2018; *Los Angeles Times,* December 24, 1972; "Application for the Erection of a Building," June 17, 1924, Search Online Building Records, at www.ladbs.org, accessed March 2018.
[32] *Los Angeles Times,* June 28, 1917 and June 29, 1917.

the telephone company in its entirety for thirty-five years. A 10-story structure, it stood 122 feet tall with standard floor-to-floor heights. Its façade resembled the new exchange at 433 South Olive, in the Renaissance Revival style common to office buildings of the twenties.[33]

This new office building also soon became inadequate. At some point between 1922 and 1929 the telephone company took ownership of the structure and in 1929 commissioned Parkinson and Parkinson to enlarge it. The architects raised the existing building two stories, added a twelve-story addition to the north, and refaced the entire building in a PWA-Moderne design.[34]

Southern California Telephone Company Building, 1922, enlarged and refaced 1929
740 South Olive Street
(Los Angeles Public Library)

In addition to its exchanges and its new administrative headquarters, the telephone company constructed numerous service facilities. Most notable were the garages. A good example is a designated resource, the Pacific Bell Building of 1922 (L.A. Historic Cultural Monument No. 331), at 2755 West 15th Street. It is typical of the type, with a single-story layout and multiple bays allowing for the

[33] *Los Angeles Times,* February 5, 1922; [33] "Application for the Erection of a Building," May 8, 1922, Search Online Building Records at www.ladbs.org, accessed March 2018.
[34] *Los Angeles Times,* March 10, 1929; "Applications to Alter," September 19 and November 20, 1929, Search Online Building Records at www.ladbs.org, accessed March 2018. The building was rehabilitated into senior housing/apartments in 1979 and is now called 740 S. Olive Street Apartments.

passage of vehicles. Similar garages can be found adjacent to the exchange at 501 East Vernon in Southeast Los Angeles and at 2450 North Daly Street in Northeast Los Angeles.[35]

Pacific Bell Building, 1922; Los Angeles Historic-Cultural Monument No. 331
2755 West 15th Street
(Los Angeles Office of Historic Resources)

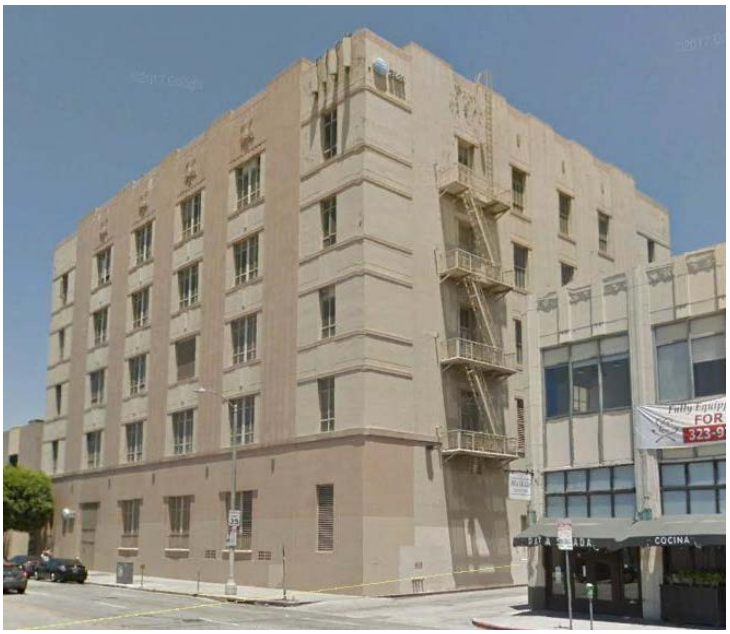
Construction of new facilities declined during the worst Depression years of the early 1930s. Some customers dropped their service and Southern California Telephone had to cut rates twice, further reducing revenue. But demand for service revived once the economy began to recover. Nationally by the end of 1937 the number of customers returned to its 1930 level. In Los Angeles recovery took place one year earlier, in 1936.[36]

The result was that Los Angeles Telephone resumed its construction program in the late 1930s. Some of these projects were new buildings, while others were enlargements of existing facilities. In both its new construction and its remodeling, the program produced several exchanges that are significant extant examples of the PWA Moderne style.

Two exchanges are representative. One is an enlargement and the other is a replacement. The quality of their design is due to the involvement of Parkinson and Parkinson. The pattern seems to have been one in which the telephone company's in-house engineering staff provided plans for the structural elements and the Parkinson firm composed the exteriors.[37]

[35] Jeffrey Herr, *Landmark L.A.: Historic-Cultural Landmarks of Los Angeles* (Los Angeles: City of Los Angeles, Cultural Affairs Department, 2002), 448.
[36] Brooks, *Telephone*, 196; *Los Angeles Times,* September 29, 1936.
[37] There is a third resource that is contemporary in original construction. This is the exchange at 3233 West Vernon Avenue in West Adams. Built in in 1939 with Parkinson listed together with G. R. Morrison as architects, it had two floors ("Application for the Erection of a Building," February 7, 1939, Search Online Building Records at www.ladbs.org, accessed March 2018). The third floor was added in 1960 ("Application to Alter," March 15, 1960,

The representative enlargement is the exchange at 666 South La Brea Avenue in the Wilshire District. The original was a three-story brick structure, over fifty-eight feet tall, that was part of the 1924 construction program. In 1941 the Telephone Company added two additional stories and refaced the exterior. The permit for the additional floors calls out G. R. Morrison as the architect. Morrison was the Building Engineer for the company and often signed as architect on earlier structures. But a supplemental permit for alteration issued two months later lists Parkinson alongside Morrison as the architect.[38]



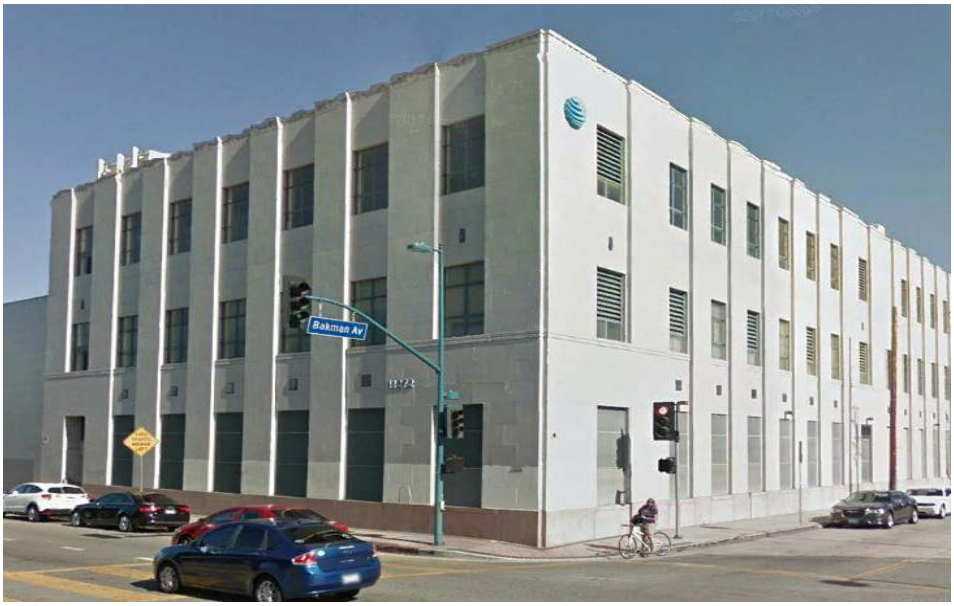
Southern California Telephone Exchange, 1928 (Enlarged and remodeled 1941)
666 South La Brea Avenue, Wilshire
(Author)

The replacement example is the exchange at 11278 West Magnolia Boulevard in North Hollywood. The original building, constructed in 1928, was a single-story brick structure. In 1937 it gave way to a steel framed two-story structure, designed to support up to ten additional floors. The new exterior walls as well as the floors and roof were of reinforced concrete. Here too Parkinson and Parkinson worked together with G. R. Morrison. (An additional story was added in two stages, in 1955 and 1965, but it followed the design of the original two-story building, which consists of seven bays along Magnolia and eight bays along Bakman Avenue.[39])

Search Online Building Records at www.ladbs.org, accessed March 2018). The existing façade, while fitting the massing of the WPA Modene, is so spare as to suggest alterations during the 1960 addition. More research, particularly a search for photos or drawings of the pre-1960 façade, is needed.

[38] *Los Angeles Times, ,* March 13, 1938 and November 30, 1941; "Application for the Erection of a Building," September 25, 1924, "Application to Alter," August 7, 1941 "Application to Alter," October 1, 1941, "Search Online Building Records," at http://www.ladbs.org, accessed March 2018.

[39] *Los Angeles Times,* March 13, 1938; "Applications for the Erection of a Building," January 30, 1928 and September 2, 1937, Search Online Building Records at www.ladbs.org, accessed March 2018. A photograph of the



Southern California Telephone Exchange, 1937 (third floor added 1955-56)
11278 West Magnolia Boulevard, North Hollywood
(Author)

Outlying areas received smaller and more lightly constructed sub-exchanges known as dial offices. One such resource from 1940 has survived generally intact at 8227 Sunland Boulevard in Sun Valley. It is a single-story stucco on wood frame building, enlarged in 1946, with a Spanish tile roof. Responsible for the design and construction once again was G. R. Morrison.[40]

Southern California Telephone Dial Office, 1940 (enlarged 1946)
8227 Sunland Boulevard, Sun Valley
(Author)

original two-story building is in *Los Angeles Times,* March 13, 1938. For the addition of the third floor see "Certificate of Occupancy," April 18, 1955, and "Application to Alter," May 3, 1956, Search Online Building Records at www.ladbs.org, accessed March 2018.

[40] "Application for the Erection of a Building," January 24, 1940, "Certificate of Occupancy" for addition, October 28, 1946, Search Online Building Records at www.ladbs.org, accessed March 2018.

Not all the resources from this period were built by Southern California Telephone. There were still outlying sections of the City which were served by other companies. One such section consists of the far western neighborhoods of Westwood, Sawtelle, Brentwood, Pacific Palisades and Venice. The Associated Telephone Company, which later became General Telephone, provided service to Santa Monica and gained a franchise in 1905 that extended into Los Angeles as far east as Beverly Glen Boulevard and as far south as National Boulevard.[41]

Associated Telephone Company Exchange, 1929-1949
Northeast corner of Cotner and Massachusetts Avenues, Sawtelle
(Author)

There is a notable resource linked to the Associated Telephone Company that dates in large part from this period, although, as with many of the resources, it has undergone multiple expansions. It is the exchange on the northeast corner of Cotner and Massachusetts Avenues in Sawelle. It is a reinforced concrete structure built in stages between 1929 and 1949. The first section, the northern half, dates from 1929, the second, the southeast quarter from 1938-1944, and the southwest portion, on the corner from 1948. It was also between 1945 and 1949 that a second floor was added to the earlier portions.[42]

During all these expansions the designer remained Maurice Sasso, about whom further research is needed. He is at times listed as the architect and at others as the engineer with no architect given, leading to the presumption that he was on staff at Associated Telephone. Even though it was not completed until the late 1940s, the style of the Associated exchange is PWA Moderne and it deserves inclusion among the other prewar exchanges.[43]

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[41] *Los Angeles Times,* July 31, 1935 and February 12, 1936.
[42] Sanborn Map for West Los Angeles, Sheet 29, 1928-1948. "Application to Alter," November 26, 1945, and "Certificate of Occupancy," May 19, 1949, Search Online Building Records at www.ladbs.org, accessed March 2018.
[43] "Application to Alter," June 17, 1929, November 26, 1937, November 26, 1945, Search Online Building Records at www.ladbs.org, accessed March 2018.

The Era of Technological Innovation, 1945-1974

In the years immediately following the Second World War the AT&T-dominated Bell system seemed to work well. Long-distance prices fell as service improved. Bell Laboratories, the research arm of the company, created innovative devices that Western Electric, the sole manufacturer of telephone equipment, presented to customers.[44]

Southern California Telephone began the postwar period by officially changing its name to Pacific Telephone and Telegraph, the title of its San Francisco-based parent company.[45] It also began an eight-year construction program that by 1953 produced 83 new buildings in Los Angeles and the surrounding communities. Most were of reinforced concrete. The "keynote of the company's building design is simplicity," according to the company's building engineer. "We try to keep our designs simple, with a minimum of non-functional ornament."[46]

Most employed the Late Moderne style. It fit well with the needs of exchange buildings, housing equipment increasingly less dependent on manual switchboards and more on electronics. A good example of the early postwar exchange is 10600 South Vermont in Southeast Los Angeles. It was completed in 1946 to a design by Donald Parkinson. While it has been altered, an historic photo shows the massing, detailing and limited fenestration typical of these buildings.[47]

Pacific Telephone and Telegraph Exchange, 1946
10600 South Vermont Avenue
(Los Angeles Public Library)

[44] Coll, *Deal of the Century,* 46.
[45] *Los Angeles Times,* February 22, 1947.
[46] *Los Angeles Times,* July 26, 1953.
[47] "Application to Erect a New Building," January 9, 1946, Search Online Building Records at www.ladbs.org, accessed March 2018.

Contemporary with the South Vermont exchange and generally intact is 4480 Kester Avenue, at its intersection with Ventura Boulevard, in Sherman Oaks. As with many others, it has been added to since 1946, but has maintained its Late Moderne character. It was designed again by Donald Parkinson, in this case with the assistance of C. Day Woodford, a partner in his firm.[48]

Pacific Telephone and Telegraph Exchange, 1946-1956
4480 Kester Avenue, Sherman Oaks
(Author)

The original reinforced concrete building on the corner of Ventura and Kester was three stories tall. In 1955 a two-story addition was added to the south, along the Kester Avenue, doubling the footprint. A year later, in 1956, a fourth floor was added to the front half and third and fourth floors to the rear half. The architect for these additions was the firm of Woodford and Bernard. C. Day Woodford and L. G. Bernard were both partners of Donald Parkinson from John Parkinson's death in 1945 until 1955, when Donald Parkinson left the firm. At that point it was renamed Woodford and Bernard.[49]

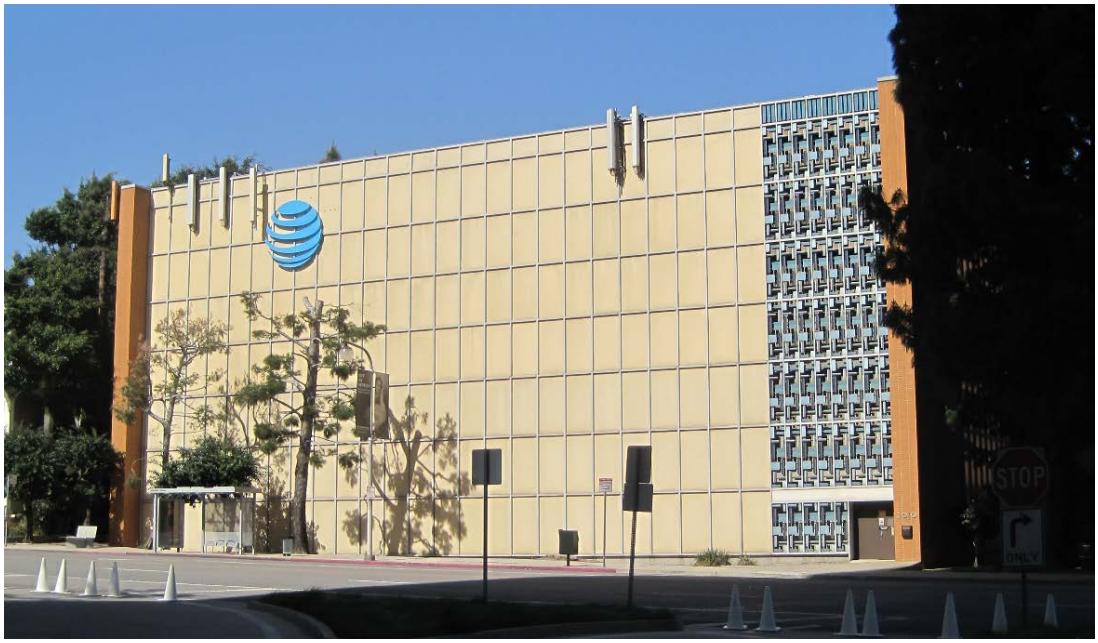
[48] "Application to Erect a New Building," April 1, 1946, Search Online Building Records at www.ladbs.org, accessed March 2018.
[49] "John and Donald Parkinson," www.wikipedia.org, accessed March 2018; "Applications to Alter," January 11, 1955, November 2, 1956, Search Online Building Records at www.ladbs.org, accessed March 2018. The evolution of the additions is shown on the drawing dated July 1, 1957 and attached to the "Application to Alter" submitted by L. B. Bernard on March 28, 1957, Search Online Building Records at www.ladbs.org, accessed March 2018.

General Telephone Company Exchange, 1953
Swarthmore and La Cruz Drives, Pacific Palisades
(Author)

Three exchanges constructed over the next twenty years illustrate how this building type incorporated features of Mid-Century Modern and later Brutalism as it accommodated fewer workers and more sophisticated equipment. The first dates from 1953 and served Pacific Palisades customers of what had been Associated Telephone and was now called General Telephone.[50]

The exchange, located at the intersection of Swarthmore Avenue and La Cruz Drive, is a two-story brick and reinforced concrete structure, with an exposed basement along the slope of La Cruz. The architect, the large corporate firm of A. C. Martin, produced a Late Moderne design featuring minimal fenestration. Its curved corner is reminiscent of Streamline Moderne while the brick base and rectilinear projecting entrance bay are early Mid-Century Modern features.[51]

[50] *Los Angeles Times,* January 1, 1953.
[51] "Application to Erect a New Building," September 4, 1957, Search Online Building Records at www.ladbs.org, accessed March 2018. It was one of two buildings that A. C. Martin designed for General Telephone that year. The other is at the intersection of Sepulveda Boulevard and Ovada Place in Westwood. See *Los Angeles Times,* September 27, 1953.



Pacific Telephone and Telegraph Exchange, 1963-1970
2010 Century Park East, Century City
(Author)

The second example is thoroughly Mid-Century Modern in style. This is the exchange at 2010 Century Park East in Century City. It was built in two stages. The lower floors were designed in late 1963 by architect Arthur E. Mann, about whom research is needed, and completed in early 1965. It was framed to accept additional levels which were added in the early 1970s by Sidney Eisenshtat, best known for his synagogues such as Sinai Temple in Westwood.[52]

Its Mid-Century Modern heritage is clear in the way in which the façade and sidewalls are treated as planes of contrasting materials that slide past each other. This exchange was notable for housing the telephone company's first "Electronic Switching System" or ESS, the most advanced equipment then available. The interior included what was called an "observation corridor." This was "a glass-walled room" which permitted "visitors to observe the operation of the equipment at first hand."[53]

The third is the exchange on the northwest corner of Sunset Boulevard and Martel Avenue in Hollywood. Even though its design dates from 1962, a year before the design of the Century City exchange, it is an early example of Brutalism, a style which would become common for exchanges by the early 1970s. Its composition is made of up assembled masses of rough concrete, notable for the use of color.

[52] "Application to Construct New Building," November 14, 1963, and "Application to Add," July 30, 1970, Search Online Building Records at www.ladbs.org, accessed March 2018; "Sidney Eisenshtat," www.laconservancy.org, accessed March 2018.
[53] *Los Angeles Times,* February 21, 1965.

Pacific Telephone and Telegraph Exchange, 1962
Intersection of Sunset Boulevard and Martel Avenue, Hollywood
(Author)

The architect was the Charles Luckman Partnership, known primarily for its large-scale commercial and planning work. The three-story building was one of the first exchanges was that totally windowless and dependent upon air conditioning. According to the *Times*, only three or four employees were required to operate the equipment.[54]

Notable among buildings other than exchanges is the office structure at 6920 Van Nuys Boulevard in Van Nuys. It was designed in 1953 as an accounting center to house staff handing billing for the San Fernando Valley. Originally two stories, with a third added later, it is of reinforced masonry construction and was designed by Woodford and Bernard. Characteristic of its Mid-Century Modernist design is the treatment of the façade. It faces west, and the elevation consists of a series of vertical fins angled to shelter the windows from the southwestern sun.[55]

[54] "Application to Construct New Building," January 2, 1962, Search Online Building Records at www.ladbs.org, accessed March 2018; *Los Angeles Times,* March 4, 1962.
[55] *Los Angeles Times,* July 26, 1953; "Application to Erect a New Building," August 24, 1953, Search Online Building Records at www.ladbs.org, accessed March 2018.

Pacific Telephone and Telegraph Office Building, 1953
6920 Van Nuys Boulevard, Van Nuys
(Author)

The most significant postwar resource, or more accurately collection of resources, is the Madison Complex in Downtown. It consists of three interconnected buildings, the old exchange at 433 South Olive Street and two postwar buildings, 420 and 434 South Grand Avenue. It developed as the primary connection point for the City's long-distance service and housed the advanced equipment needed for this connection.

There were three innovations in the postwar period that produced the evolution of the Complex. The first was the creation of the coaxial cable system in the late 1940s which carried television as well as telephone transmissions. The second was the use of transistors in place of vacuum tubes, first installed in the equipment used for long-distance dialing in the mid-1950s. The third was the introduction of microwave transmission that by the 1960s had replaced the coaxial cable as the primary means of long-distance communication.

As the postwar period began, what was called the Communications Center Facility was housed at 433 South Olive alone. The coaxial cable was due to reach Los Angeles by the late 1940s and the telephone company decided to erect a new building to receive it. The site chosen was 434 South Grand Avenue, to the rear of 433 South Olive, which the telephone company had owned since the 1920s. Construction began in late 1946 on the reinforced concrete structure that reached the height limit of 150 feet. Design was by C. Day Woodford of the Parkinson firm.[56]

[56] *Los Angeles Times,* June 1, 1955; [56] Commentary to "Coaxial cable equipment installed" photograph, August 19, 1947, (order number 00095945), Photo Collection, Los Angeles Public Library.
"Application to Erect a New Building," August 19, 1946, and "Application to Alter," December 6, 1946, Search Online Building Records at www.ladbs.org, accessed March 2018.

All long-distance calling went through the new Grand Avenue building. By 1954 it housed, in addition to the coaxial cable terminals, the telephone system's first installation of transistors. This permitted the company to begin limited direct-dial long-distance service.[57] Grand Avenue contained what the *Times* called "the electronic brain machines" that also provided for television transmission and the early use of microwaves.[58]

By the late 1950s microwave transmission required a facility of its own. In 1959 about 65 percent of the City had direct long-distance dialing, and the purpose of a new building was to house equipment to provide for those still without it. What was called a new Communications Center went up just to the north of 434 at 420 South Grand. Once it was completed, the two Grand Avenue buildings would comprise the largest such concentration of telephone equipment in the west.[59]

Original Pacific Telephone and Telegraph Equipment Building, 1959, and Microwave Tower, 1961-1962
420 South Grand Avenue (top of 434 South Grand Avenue, 1946-1947, in background)
(Los Angeles Public Library)

The design of the 1959 structure matched that of the original 1946 building. The architects were Woodford and Bernard, who were involved in the design of the original. The new building was eight

[57] *Los Angeles Times,* March 25, 1954; April 29, 1954; May 21, 1954.
[58] *Los Angeles Times,* June 2, 1955.
[59] *Los Angeles Times,* October 1, 1959.

stories of reinforced concrete, framed to accept an additional eight stories. The belief was that additional space would be needed by 1967.[60]

Enlarged Pacific Telephone and Telegraph Equipment Building and new Microwave Tower, 1966-1967
420 South Grand Avenue (top portion of original façade of 433 South Olive Street at far right)
(Los Angeles Public Library)

The most striking feature of 420 South Grand was the microwave tower on its roof. Placed in service In March 1962, it housed five horns for receiving and sending communications for telephones, teletypewriters, radio and television.[61] Officially known as the "radio microwave antenna support," the *Times* called it "one of the city's major construction jobs" for that year."[62]

The tower, with its blue steel wire mesh and cream-colored aluminum panels, inevitably became a subject of comment. Publicity for the telephone company referred to it as the "Launching Pad for Space

[60] *Los Angeles Times,* January 7, 1959 and October 1, 1959; "Application to Alter," June 22, 1959, Search Online Building Records at www.ladbs.org, accessed March 2018.
[61] *Los Angeles Times,* April 8, 1962 and December 19, 1962; "Application to Alter," October 2, 1961, Search Online Building Records at www.ladbs.org, accessed March 2018.
[62] *Los Angeles Times,* April 8, 1962.

Communications." A columnist for the *Times* called it "strikingly beautiful" and maintained that it provided the sensation that the "world of tomorrow" is close.[63]

As anticipated, the building soon rose eight more stores and an additional 132 feet. The *Times* noted that the encroaching of tall buildings as well as the need for more space made the enlargement necessary. Design began in 1966 and work started the next year. Woodford and Bernard supplied the plans. Placed atop the extension was a new tower, identical in design but higher. While no longer housing microwave equipment, the tower remains as a significant architectural feature.[64]

The Breakup of the Bell System, 1974-1984

Despite its apparent success, by the late 1960s AT&T faced serious problems. As costs rose and rates at the local levels remained regulated, the company began to skimp on needed capital investment. Among its subsidiaries, Pacific Telephone and Telegraph was in particularly poor financial shape. It had to cope with stringent California regulation and had a large debt to service. Although the largest of the subsidiaries, it was considered economically the worst performing.[65]

Adding to these problems were two rulings of the Federal Communications Commission in the late 1960s. In 1968 the FCC stated that the market for telephone equipment had to be opened to competition. Instead of leasing equipment from the phone company's limited offerings, customers could buy devices, such as phone sets with answering machines, made by others. By the late 1970s about half the market went to products made by outside manufacturers.[66]

The second FCC ruling came one year later, in 1969. It allowed a company called Microwave Communications Incorporated, or MCI, to set up an experimental independent microwave long-distance telephone connection between Chicago and St. Louis. AT&T was required to provide MCI access to its local exchanges at the termination points, for which it could charge a fee. Eventually MCI gained the right to compete in all markets but found AT&T unwilling to allow access to its local telephone companies at a cost MCI felt was reasonable.[67]

It was this issue which led to the eventual breakup of the Bell system. Potential competitors such as MCI maintained that AT&T had an innate conflict of interest as a provider of both long distance and local service. Such a vertical monopoly may have been justified in the era of landlines but was no longer necessary with alternative transmission technology such as microwave. So long as one long-distance

[63] *Los Angeles Times,* May 15, 1962.
[64] *Los Angeles Times,* January 1, 1967; "Application to Alter," July 6, 1966, Search Online Building Records at www.ladbs.org, accessed March 2018.
[65] Coll, *Deal of the Century,* 8, 142-143.
[66] Ibid., 9-11, 111.
[67] Ibid., *Deal of the Century,* 11-12, 19

provider, AT&T, also controlled local service, equal access to that local service for other long-distance providers was innately impossible.[68]

In 1974 the Federal government agreed and sued, demanding the breakup of the Bell system. In January of 1982 AT&T agreed to a consent decree that limited it to providing long-distance service. Its regional subsidiaries, such as Pacific Telephone and Telegraph, would become independent companies, popularly known as the Baby Bells. AT&T as well as MCI and other long-distance providers could now complete on an equal basis for the business of these regionals. [69]

The breakup was implemented by January of 1984. The AT&T subsidiary Pacific Telephone and Telegraph become the independent Pacific Bell Telephone Company, or PacBell. Over the next twenty years it evolved into a company that assumed the historic name of AT&T. It is the AT&T logo which now adorns its exchanges.[70]

General Telephone, which continued to service far westside neighborhoods under the name of GTE, remained independent until 2000. That year it was taken over by Atlantic Bell, another of the Baby Bells, and the combined company was renamed Verizon. Then, beginning in 2009 Frontier Communications took control of some of the Verizon service.[71]

Despite these corporate changes, as well as the many technological advances since the early 1980s, most of the exchanges still serve telephone purposes. This is due to the flexibility of the buildings. From the early 1920s, they were designed to accept renovation and enlargement, and have adapted well to later needs. This may disappoint those who seek intact original features, but these resources were never intended as works of long-lasting design significance. The fact that so many remain handsome examples of a type of industrial architecture is a credit to the skill of their architects over the years in modifying them to the needs of the day.

[68] Ibid., *Deal of the Century,* 170.
[69] Ibid., *Deal of the Century,* 63-72.
[70] A holding company, Pacific Telesis, controlled both Pacific Bell and Nevada Bell. In 1997 Pacific Telesis was acquired by SBC Communications, and the company was renamed SBC Pacific Bell in 2001. In 2005 SBC completed its acquisition of the remnant long distance company AT&T and took its name.
[71] The General Telephone exchange discussed above in Pacific Palisades now serves Frontier.

EVALUATION CRITERIA FOR TELEPHONE-RELATED RESOURCES

Summary Statement of Significance: Resources evaluated under this theme are examples of buildings housing facilities for telephone service. They are significant in the areas of Communications and of Community Planning and Development. They show how telephone service was able to create building types to provide for the needs of its equipment and its employees. The evolution of these building types during the period of significance illustrates the changing nature of telephone service, in both its equipment and its business organization. In terms of Community Planning and Development, resources show how a key urban service grew to provide for the needs of residents in new districts, and constructed facilities in those districts that served as landmarks due to their size and placement in highly visible locations. Resources may also be significant in the area of Architecture, in that they may be good examples of styles and/or construction technologies typical of their period and/or good examples of the work of significant architects.

Period of Significance: 1881-1974

Period of Significance Justification: The period begins in 1881 with the organization of the Los Angeles Telephone Company. It ends in 1974, when the Federal government sued to break up the national telephone system as it had existed up to that point.

Geographic Location: Citywide, including areas served by the Bell-associated company and areas served by independents.

Areas of Significance: Communications, Community Planning and Development, Architecture

Criteria: NR: A/ C CR: 1/3 Local: 1/3

Associated Property Type: Institutional – Communications - Telephone Exchange Building
Institutional – Communications - Telephone Office Building
Institutional – Communication - Telephone Service/Garage

Property Type Description: Exchanges house switching equipment and the employees who manage the equipment. They are a building type specific to telephone service. Office buildings contain the telephone company's administrative personnel. Telephone service and garage buildings provide for vehicles, shops, and the like.

Property Type Significance: See Summary Statement of Significance above.

Eligibility Standards:

- Dates from the period of significance
- Is associated with the history and development of telephone service in Los Angeles
- Was historically used as telephone exchange, office building, and/or service/garage facility

Character Defining/Associative Features:

- Large-scale multi-story mass with unusually tall floor-to-floor heights (exchange)
- Relatively limited fenestration in later resources (exchange)
- Follows typical commercial architectural patterns of the period (office building)
- Single-story with wide, often multiple, openings for vehicle access (service/garage facility)
- May be a significant example of an architectural style, construction technique, and/or work of a noted architect

Integrity Aspects

- Should retain integrity of Location, Design, Feeling, Materials, and Association
- Original mass, wall cladding, window and door openings should be intact
- Original use may have changed
- Late example may still be in use
- Setting may have changed (surrounding land uses)

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